

# ONE NEW SPECIES OF THE GENUS *XINJIANGACRIS* (ORTHOPTERA, ACRIDIDAE, GOMPHOCERINAE) FROM CHINA

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**Abstract** A new species of the genus *Xinjiangacris* Zheng, 1993, *X. flavitibis* sp. nov., is described in this paper. The new species is similar to *X. rufitibis* Zheng, 1993, but differs from the latter in the tegmina surpassing top of hind femur; cubital area 3 times as wide as medial area; lower side of hind femora yellow; and hind tibia ochre. Type specimens are deposited in the Institute of Zoology, Shaanxi Normal University, China.

**Key words** Orthoptera, Acrididae, Gomphocerinae, *Xinjiangacris*, new species, China.

The genus *Xinjiangacris* was established by Zheng in 1993 (type species: *Xinjiangacris rufitibis* Zheng, 1993). Only one species of the genus was recorded in Yili Region, the Xinjiang Uygur Autonomous Region, China.

During identifying the specimens of grasshoppers collected from Kazak, Xinjiang, a new species of the genus *Xinjiangacris* is found and described below. The type specimens are deposited in the Institute of Zoology, Shaanxi Normal University, China.

## Key to the closely related genera.

1. Lateral keels of pronotum indistinct in middle ..... *Xinjiangacris* Zheng, 1993
  - ..... Lateral keels of pronotum contiguous, present in middle ..... 2
  2. Cubital area broader, width of cubital area 1.47 – 4.00 times the width of medial area; hind wings dark brown or apical area light brown ..... 3
    3. Cubital area narrower, width of cubital area 1.25 times the width of medial area; hind wings transparent ..... *Paracyptera* Tarbinsky, 1930
      - ..... Lateral keels of pronotum almost straight, hind wings dark brown ..... *Arcyptera* Audinet-Serville, 1839
        - ..... Lateral keels of pronotum slightly curved in prozona, basal area of hind wings transparent, apical area light brown ..... 4
        4. Width of cubital area 1.47 times the width of medial area; apical area of hind wings light brown ..... *Ningxiacris* Zheng et He, 1997
          - ..... Width of cubital area 2 – 3 times the width of medial area; apical area of hind wings light brown, apex with blackish spots ..... *Amplicubitoacris* Zheng, Mao et Shi, 2010

## *Xinjiangacris* Zheng, 1993

*Xinjiangacris* Zheng, 1993. *Journal of Hubei University*, 15 (1) : 1; Zheng, 1993. Acritaxonomy, 282; Zheng et Xia, 1998. *Fauna Sinica, Insectas*, Vol. 10, Orthoptera, Acridoidea, Oedipodidae and Arcypteridae, 309. Type species: *Xinjiangacris rufitibis* Zheng, 1993.

Median size. Fastigium of vertex wide and short, interocular distance wider than frontal ridge between antennae about 2 times; foveola quadrilateral, its length about 2 times as width. Frontal ridge wide and flat, lateral facial keels indistinct. Lateral keels of

pronotum indistinct in middle; posterior margin nearly rounded, length of prozona as long as metazona. Tegmina developed, reaching knee or surpassing the top of hind femur, the width of costal area as wide as cubital area, maximum width of cubital area 2 – 3 times as medial area. Top of lower kneelobes rounded. Lower spurs of inner side of hind tibia as long as upper spurs about 1.3 times. Metasternal lobes wide separate. Tympanal organ developed.

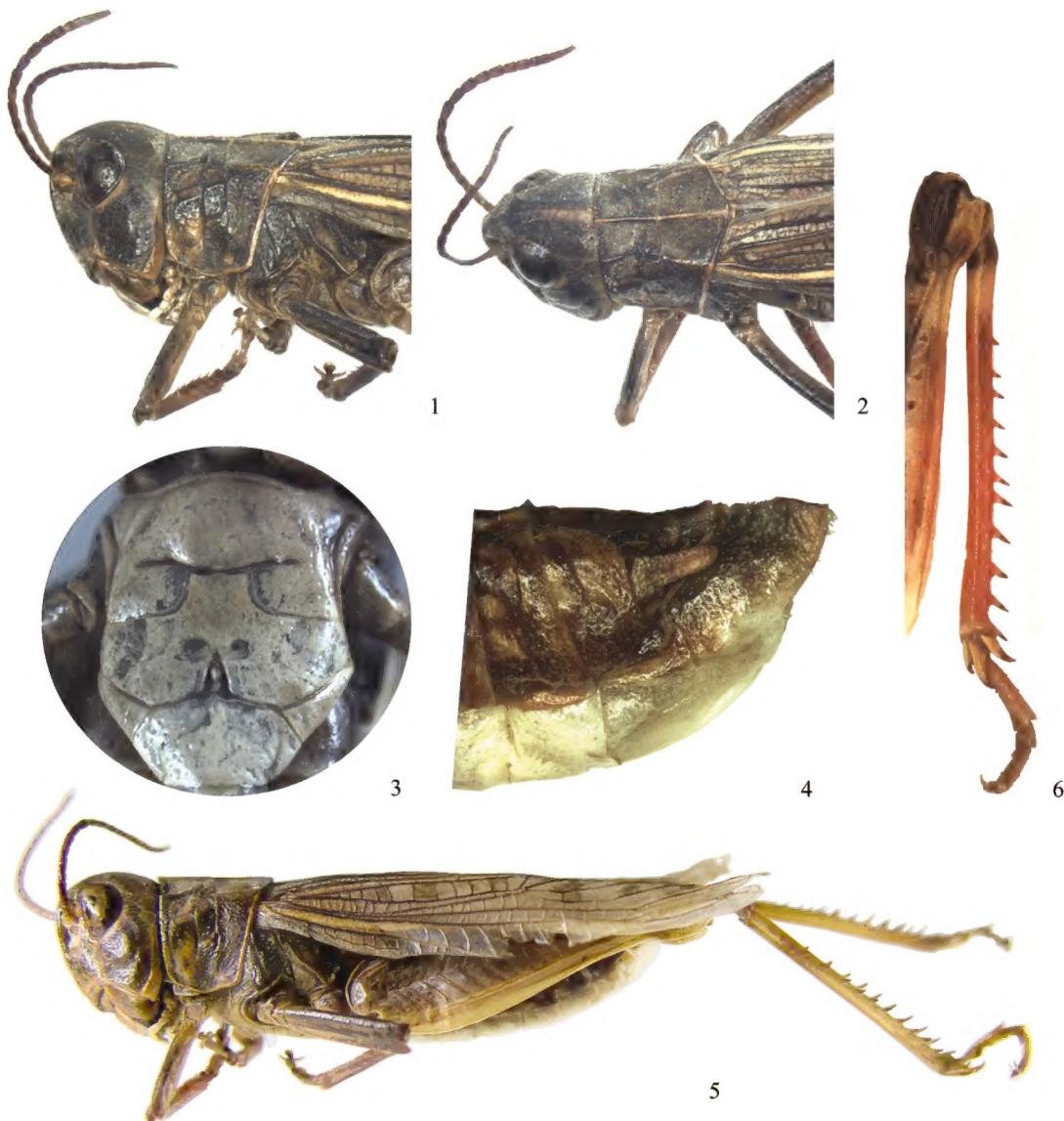
## *Xinjiangacris flavitibis* sp. nov. (Figs 1 – 5)

Median size. Vertex wide, triangular, with obviously median keel extending to occiput and lateral margin keels, interocular distance wider than frontal ridge between antennae about 2 times; foveola quadrilateral, its length about 2 times as width; vertex and frontal ridge forming obtuse angular in profile. Frontal ridge wide and flat, depressed in median ocellus, lateral margin straight, widen gradually downwards from median ocellus and vanishing nearby base of labrum; lateral facial keels distinct. Antennae filiform, stubby and short, not surpassing posterior margin of pronotum, length of a segment in middle of antennae 2 times its width. Eyes oval, longitudinal diameter 1.35 times as horizontal diameter and 1.9 times as subocular furrows. Anterior margin of pronotum straight and posterior margin obtuse angular; median keel of pronotum distinct, lateral keels distinct before area of anterior transverse sulcus and after the area of posterior sulcus, but weak in middle area; posterior transverse sulcus situated at middle of pronotum; height of lateral lobe greater than its length, lower margin S-shaped, anterior lower angle obtuse but posterior lower angle right-angle. Tegmina developed, surpassing top of hind femur, apex of tegmina rounded, costal area slightly broader than cubital area (1.0: 0.8), maximum width of

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Figs 1 – 5. *Xinjiangacris flavitibis* sp. nov., ♂. Fig. 6. *Xinjiangacris rufitibis*, inner side of hind tibia. 1. Head and pronotum, lateral view. 2. Head and pronotum, dorsal view. 3. Interspace of mesosterum. 4. End of abdomen, lateral view. 5. Lateral view.

cubital area 3 times medial area, precostal area with intercalary vein, hind wings equal to tegmina in length. Length of hind femur as 4 times width, upper and lower median keel smooth, apex of lower kneelobe of outer side rounded; upper inner sides of hind tibia with 10 spines and out sides of it with 11 spines, outer apical spine absent, length of internal and external lower spurs 1.5 times as the upper spurs; first segment of hind tarsi equal in length to the sum of second and third segments; claw symmetrical, arolium long, reaching half of the claws. Width of mesosternal lobes greater than its length, interspace of mesosternal lobes approximately square, metasternal lobes separated. Tympanal organ developed, nearly rounded. Anal plate long triangular, with transverse furrow in middle and longitudinal furrow in middle of base. Cercus columned, nearly reaching end of anal

plate. Subgenital plate short conical, apex obtuse.

Body dark brown. Basal two segments of antennae yellowish brown. Vertex with yellowish brown longitudinal stripe in the middle. Tegmina brown, half base of costal area with one white longitudinal stripe; hind wings transparent. Upper side of hind femur brown, outer side yellowish brown, inner and lower sides yellow, upper kneelobe black, lower kneelobe yellowish brown. Hind tibiae ochre, base black with yellow ring around black. Ventral side of thorax and abdomen light yellow.

Female. Unknown.

♂. Length of body 18 – 20 mm; length of pronotum 3.0 – 3.5 mm; length of tegmina 17 – 18 mm; length of hind femur 14 mm.

Holotype ♂, Jeminay County (47° 24' N, 85° 48' E), Xinjiang, 1 July 2010, collected by DONG

Jia-Jia. Paratype 1 ♂, same data as holotype.

Diagnosis. The new species is similar to

*Xinjiangacris rufitibis* Zheng, 1993, but differs from the latter in the characters given in Table 1.

**Table 1. Difference between *X. flavitibis* sp. nov. and *X. rufitibis*.**

	<i>X. rufitibis</i>	<i>X. flavitibis</i> sp. nov.
Tegmina	Reaching knee of hind femur	Surpassing top of hind femur
Maximum width of cubital area wider than medial area	2.0–2.2 times	3 times
Lower side of hind femur	Light reddish orange	Yellow
Hind tibia	Red	Ochre

**Etymology.** The specific name is derived from the Latin “*flav*” and “*tibia*”, meaning the color of hind tibia.

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## 中国新疆蝗属一新种（直翅目，蝗科，大足蝗亚科）

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**摘要** 记述新疆蝗属1新种，黄胫新疆蝗 *Xinjiangacris flavitibis* sp. nov.。新种近似于红胫新疆蝗 *Xinjiangacris rufitibis* Zheng, 1993, 但区别于后者为：前翅超过后足股节顶端；肘

**关键词** 直翅目，蝗科，大足蝗亚科，新疆蝗属，新种，中国。  
**中图分类号** Q969.265.2

脉域宽为中脉域宽的3倍；后足股节下侧黄色；后足胫节黄褐色。模式模本保存于陕西师范大学动物研究所昆虫标本室。

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